

REMARKS***Status of the Claims***

Claims 15-22, 29-43 are pending in the present application. In this Response, claims 15-17, 19, 29, and 30 have been amended and new dependent claims 31-43 have been added. Exemplary support for the claim amendments can be found throughout the claims and specification as filed. Applicants respectfully request the Examiner to reconsider and withdraw the outstanding rejections in view of the foregoing amendments and the following remarks.

Rejections under 35 U.S.C. § 112

Claims 15-22, 29, and 30 have been rejected under 35 U.S.C. § 112, first paragraph, because the specification, while being enabling for the disclosed substituents, does not reasonably provide enablement for all of the encompassed substituents by the claimed recitation of "substituted". Applicants respectfully submit that amended claims 15 and 30 recite "R₁ and R₂, which are different or identical, are substituted or unsubstituted aliphatic radicals with no aromatic nucleus" the term "substituted" is sufficiently enabling in the manner disclosed at page 12, lines 26-30 of the specification. As the Examiner agrees that the specification is sufficiently enabling for the disclosed substituents, Applicants respectfully submit that the claims are also sufficiently enabling for at least the same reasons.

Claims 15-22, 29, and 30 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants respectfully submit that as noted hereinabove, the formulas submitted in this amendment are legible and have not been amendment since the original filing of the disclosure on October 7, 2005. Accordingly, Applicants respectfully submit that in view of the Interview Summary dated April 17, 2008, this rejection should be withdrawn.

In light of at least the foregoing, Applicants respectfully submit that the rejection under 35 U.S.C. § 112, first paragraph should be withdrawn.

Claims 15-22, 29, and 30 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite and failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully submit that the claim amendments and arguments submitted herewith overcome the rejections set forth in

items A - C. With regard to the rejection in item A, it should be noted that the polydispersity index refers to the emulsion as a whole. With regard to the rejection in item B, "and" has been replaced with "are". With regard to the rejection in item C, the claims have been amended to delete narrowing ranges using the "optionally" language. The features thus deleted have been maintained by adding new dependent claims 31-43. In view of at least the foregoing, Applicants respectfully submit that the rejection under 35 U.S.C. § 112, second paragraph should be withdrawn.

Rejection under 35 U.S.C. § 103

Claims 15-22 and 29-30 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 6,528,573 (hereinafter "Probst") in combination with the teachings of U.S. Patent Publication No. 2001/0021746 (hereinafter "Nabavi").

The Office has the initial burden of establishing a *factual basis* to support the legal conclusion of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). For rejections under 35 U.S.C. § 103(a) based upon a combination of prior art elements, in *KSR Int'l v. Teleflex Inc.*, 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007), the Supreme Court stated that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." "Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some *articulated reasoning with some rational underpinning* to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) (emphasis added).

Probst discusses a two-component polyurethane coating composition comprising a solution and/or a dispersion of at least two polyols, and a polyisocyanate component. (Col. 2, lines 17-21). The emulsifier cited by the Examiner (see Col. 4, lines 23-40) is an emulsifier used for the synthesis of the polyol (see Col. 3, line 62 to Col. 4, line 14), not an emulsifier used in the composition. In the composition of Probst, it is described that the polyol itself performs the function of emulsifier of the isocyanate. (Col. 7, lines 62-67). The Examiner also cites Col. 5, lines 64-67, but the particle diameters cited here relate to the dispersion of polyol (see Col. 5, lines 58-67) and not the particle diameters of the composition.

Thus, Applicants respectfully submit that Probst does not disclose or suggest the presently recited adhesive emulsion.

Nabavi relates to isocyanate-based compounds and compositions. (Page 1, paragraph [0001]). Nabavi discloses composition based on isocyanate(s), advantageously not completely masked, characterized in that it comprises at least one compound containing an anionic functional group and advantageously a polyethylene glycol chain fragment of at least one, preferably at least 5 ethyleneoxy units. (Claim 1).

Applicants respectfully submit that amended independent claims 15 and 30 are directed to the use of an adhesive emulsion of an emulsifiable isocyanate composition comprising an isocyanate composition and a surfactant. (See, for example, page 9, lines 17-36 and page 10, lines 1-22 of the present specification). More particularly, Applicants respectfully submit that amended independent claims 15 and 30 are clearly related to the specific technical field of adhesives. (See, for example, page 1, lines 10-11; page 1, line 14; page 5, line 39; page 6, line 4; page 6, lines 20-36; page 7, line 16; page 7, lines 29-37; page 8, lines 15-17; page 9, lines 10-15; page 18, lines 37-38; page 19, lines 1-4; page 19, lines 38-39; page 23, lines 5-8; page 31, line 27; and examples at pages 35-36 of the present specification).

Applicants respectfully submit that the use of the adhesive emulsion in adhesives, as presently recited in amended independent claims 15 and 30, is neither disclosed nor suggested by the document Nabavi. Further, Applicants respectfully submit that the compositions of Nabavi, in contrast to the presently pending claims, are directed to paints and varnishes. (See, for example, page 1, paragraphs [0005], [0010], and [0011]; page 9, paragraph [0165]; and page 10, Examples 10-13 of Nabavi). Applicants respectfully submit that Nabavi's paints and varnishes are directed to a technical field which is completely different from that of the presently recited use of adhesive emulsions. In particular, as discussed in the Response submitted on May 16, 2008, Applicants respectfully submit that the requirements for Nabavi's varnish or paint compositions are completely different from those required for an adhesive composition. More particularly, Applicants respectfully submit that Nabavi's varnish and paint compositions are required to meet certain standards of gloss, chemical resistance, and hardness. (See, for example, page 10, Examples 10-13 of Nabavi). In contrast, the presently recited adhesive emulsion is required to meet standards of breaking strength and peeling. (See, for example, pages 35-36 of the present specification). Accordingly, Applicants respectfully disagree with the Examiner's position that Nabavi's coating is the same as the presently recited adhesive. In this regard, as described in the

Response submitted on May 16, 2008, Applicants respectfully submit definitions of a protective coating and an adhesive as set forth in Hawley, *The Condensed Chemical Dictionary*, Tenth Edition, page 867 (1981) and LeSota, *Coatings Encyclopedic Dictionary*, Federation of Societies for Coatings Technology, page 8 (1995), respectively. As noted in Hawley, a protective coating serves decorative purposes and/or a protective function. In contrast, as noted in LeSota, an adhesive is a substance which is capable of holding materials together. As such, Applicants respectfully submit that the two definitions clearly distinguish adhesives and coatings as being distinct from one another. In view of at least the foregoing, Applicants respectfully submit that a coating composition will not have the same behavior when used as a coating (*i. e.*, when deposited as a thin layer on a support) versus when used between two supports to be joined (*i.e.*, as an adhesive). In particular, Applicants respectfully submit that the drying properties of the two will not be the same.

Moreover, Applicants respectfully submit that Nabavi fails to disclose or suggest all the features recited in amended independent claims 15 and 30.

With regard to the combination of Probst and Nabavi, Applicants respectfully submit that nothing in either Probst or Nabavi would lead one of ordinary skill in the art to use the emulsifier of Nabavi in the composition of Probst, in order to use the composition as an adhesive.

Applicants respectfully submit that while the emulsifier presently recited was known for use in coating compositions, the emulsifier is also known to be notorious in impairing the strength of the bond between the coating and its support. In fact, Applicants respectfully submit that the emulsifier is known and used to inhibit the attachment between a polymer and a support. Applicants respectfully submit that such a phenomenon is in fact described in, for example, DE 3108537.

Accordingly, Applicants respectfully submit that a property that is contrary to that of the property presently recited (*i.e.*, property of an adhesive) is taught in the prior art with regard to the presently recited emulsifier.

In light of at least the foregoing, Applicants respectfully submit that the rejection over Probst and Nabavi should be withdrawn.

Conclusion

Applicants invite the Examiner to contact Applicants' representative at the telephone number listed below if any issues remain in this matter, or if a discussion regarding any portion of the application is desired by the Examiner.

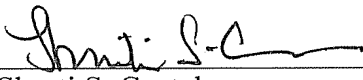
In the event that this paper is not timely filed within the currently set shortened statutory period, Applicants respectfully petition for an appropriate extension of time. The fees for such extension of time may be charged to our Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: December 24, 2008

By: 
Shruti S. Costales
Registration No. 56,333

Customer No. 21839

P.O. Box 1404

Alexandria, VA 22313-1404

(703) 836-6620